

Claims of PCT/EP98/07570 by Agfa (Juergen Mueller, Herbert Gebele, Thomas Zehetmaier, Ralph Thoma):

Claim 1

Apparatus for row-wise reading of information stored on a phosphor plate with a radiation source used to send a first radiation with which the phosphor can be excited such that it sends out a second radiation which contains an at least partial image of the stored information, and a receiving device for point wise reception of the second radiation, CHARACTERIZED BY a receiving device consisting of a plurality of point elements PD1...PDN, such that the radiation from the phosphor plate can be received at the same time by these point elements.

Claim 2

Claim 1 such that the radiation source is configured such that multiple points of the phosphor, in particular all points of a row can be excited at the same time.

Claim 3

Receiving device is a CCD array.

Claim 4

Radiation source configured such that it can create multiple beams (S0...S9).

Claim 5

Using laser diodes as radiation source.

Claim 6

The number of laser diodes equals the number CCD pixels.

Claim 7

Using a halogen lamp and light guide for illumination.

Claim 8

Fanning out of beams out of beams S0...S9.

Claim 9

Like claim 8, focusing on a single row.

Claim 10

Radiation source configured as a "wire lamp".

Claim 11

Between phosphor and CCD is an imaging system that images point-to-point referred to as "Selfoc" lens

Claim 12

Same apparatus on both sides of plate.

Claim 13

Pixels are wider (80u) than they are high (20u); this claims suggests to integrate four subsequent rows to create 80x80 pixels.

Claim 14

Everything integrated into a cassette.

Claim 15

Dual phosphor plate - materials have different characteristics (probably for tissues vs. bone imaging).

Claim 16

Using an "electrical linear motor" to move the assembly over the plate.

Claim 17

Adding an erasing device to the cassette.

Claim 18

Using the linear motor to move the erasing device over the plate.